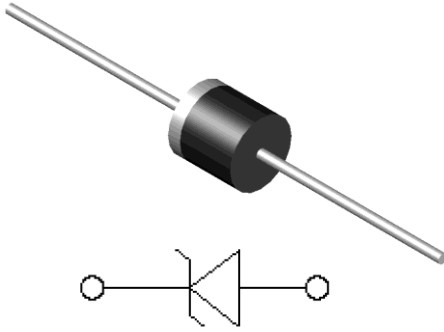


## Transient Voltage Suppressor Diodes

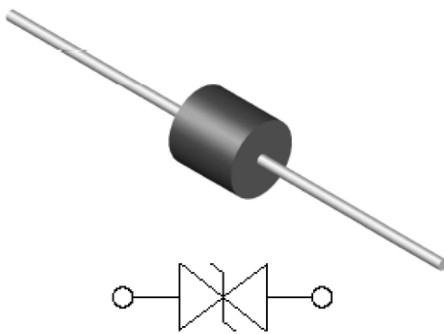
### Uni-directional



### Features

- Excellent clamping capability
- Low dynamic impedance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Bi-directional



### Mechanical Data

- **Package:** R-6  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Max
Peak power dissipation, with a 10/1000us waveform <sup>(1)</sup>	$P_{PPM}$	W	30000
Peak pulse current, with a 10/1000us waveform <sup>(1)</sup>	$I_{PPM}$	A	See Next Table
Power dissipation, on infinite heat sink at TL=75°C	$P_D$	W	8.0
Operating junction and storage temperature range	$T_J, T_{STG}$	°C	-55 to +150

Notes:

(1) Non-repetitive current pulse, per Fig. 3 and derated above  $T_A = 25^\circ\text{C}$  per Fig.2.

### ■Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
30KP SERIES	D1	Approximate 2.22	500	500	5000	Tape
30KP SERIES	C1	Approximate 2.22	100	100	5000	Bulk



# 30KP SERIES

## ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage V <sub>BR</sub> @I <sub>T</sub>			Maximum Reverse Leakage I <sub>R</sub> @ V <sub>WM</sub> (μA)	Working Peak Reverse Voltage V <sub>RWM</sub> (V)	Maximum Reverse Surge Current I <sub>PP</sub> (A)	Maximum Clamping Voltage V <sub>c</sub> @ I <sub>PP</sub> (V)
		Min(V)	Max (V)	I <sub>T</sub> (mA)				
30KP28A	30KP28CA	31.28	34.24	50	5000	28	606	50
30KP30A	30KP30CA	33.51	36.69	50	5000	30	548.9	55.2
30KP33A	30KP33CA	36.9	40.4	50	5000	33	517.9	58.5
30KP36A	30KP36CA	40.2	44	50	5000	36	490.3	61.8
30KP39A	30KP39CA	43.6	47.7	20	2000	39	450.9	67.2
30KP42A	30KP42CA	46.9	51.4	10	1000	42	420.8	72
30KP43A	30KP43CA	48	52.6	10	1000	43	415.1	73
30KP45A	30KP45CA	50.3	55	5	250	45	391.5	77.4
30KP48A	30KP48CA	53.6	58.7	5	150	48	371.3	81.6
30KP51A	30KP51CA	57	62.4	5	50	51	350.7	86.4
30KP54A	30KP54CA	60.3	66	5	20	54	331.5	91.4
30KP58A	30KP58CA	64.8	70.9	5	20	58	327.9	92.4
30KP60A	30KP60CA	67	73.4	5	15	60	297.1	102
30KP64A	30KP64CA	71.5	78.3	5	10	64	291.3	104
30KP66A	30KP66CA	73.7	80.7	5	10	66	283.2	107
30KP70A	30KP70CA	78.2	85.6	5	10	70	278	109
30KP71A	30KP71CA	79.3	86.8	5	10	71	271.7	111.5
30KP72A	30KP72CA	80.4	88.1	5	10	72	265.8	114
30KP75A	30KP75CA	83.8	91.7	5	10	75	253.8	119.4
30KP78A	30KP78CA	87.1	95.4	5	10	78	234.9	129
30KP84A	30KP84CA	93.8	102.7	5	10	84	217.7	139.2
30KP90A	30KP90CA	100.5	110.1	5	10	90	207	146.4
30KP96A	30KP96CA	107.2	117.4	5	10	96	194.2	156
30KP102A	30KP102CA	113.9	124.7	5	10	102	183	165.6
30KP108A	30KP108CA	120.6	132.1	5	10	108	172.9	175.2
30KP120A	30KP120CA	134	146.8	5	10	120	155.9	194.4
30KP132A	30KP132CA	147.4	161.4	5	10	132	142.3	213
30KP144A	30KP144CA	160.8	176.1	5	10	144	135.8	223.2
30KP150A	30KP150CA	167.6	183.5	5	10	150	129.8	233.4
30KP156A	30KP156CA	174.3	190.8	5	10	156	123.7	245
30KP160A	30KP160CA	178.7	195.7	5	10	160	120	252.6
30KP168A	30KP168CA	187.7	205.5	5	10	168	111.2	272.4
30KP170A	30KP170CA	189.9	207.9	5	10	170	110.2	275
30KP180A	30KP180CA	201.1	220.1	5	10	180	104.3	290.4
30KP198A	30KP198CA	221.2	242.2	5	10	198	94.7	319.8
30KP216A	30KP216CA	241.3	264.2	5	10	216	86.9	348.6
30KP240A	30KP240CA	268.1	293.5	5	10	240	78.3	387
30KP258A	30KP258CA	288.2	315.5	5	10	258	72.8	416.4
30KP260A	30KP260CA	290.4	318	5	10	260	72.8	416
30KP270A	30KP270CA	301.6	330.2	5	10	270	69.5	436.2
30KP280A	30KP280CA	312.8	342.4	5	10	280	65.3	464
30KP288A	30KP288CA	321.7	352.2	5	10	288	64.5	469.9



## ■ Characteristics (Typical)

FIG1: Peak Pulse Power Rating Curve

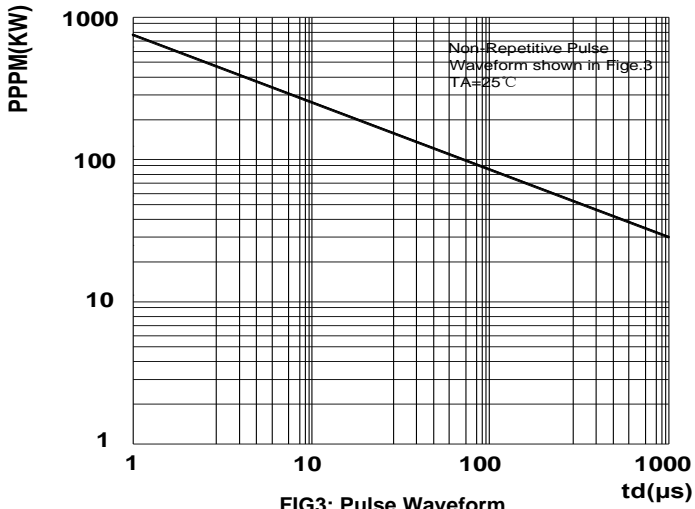


FIG3: Pulse Waveform

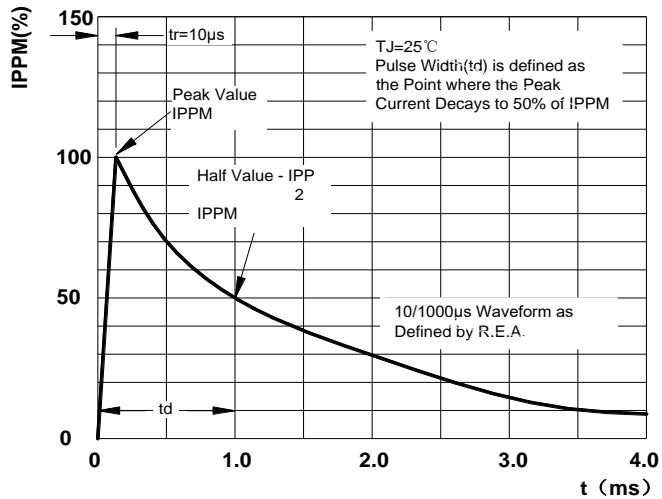


FIG4: Pulse Power or Current vs Initial Junction Temperature

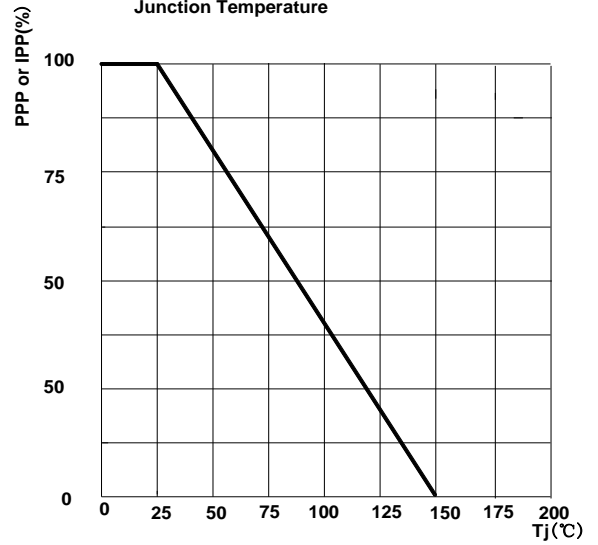
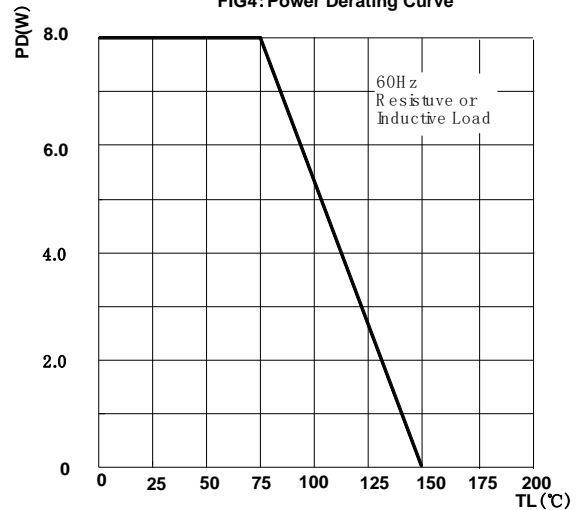
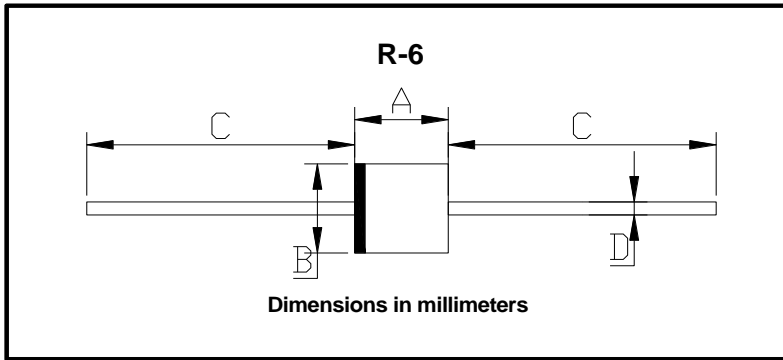


FIG4: Power Derating Curve





## ■ Outline Dimensions



R-6		
Dim	Min	Max
A	8.60	9.10
B	8.60	9.10
C	25.4	/
D	1.20	1.32



## 30KP SERIES

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